

## Plagiarism

A paper by Fakrudin *et al.*<sup>1</sup> is a plagiarized version of our paper<sup>2</sup>. Their text almost in its entirety (> 90%) including title and footnote of the tables (which do not represent their results of leaf-dip assays) was lifted straight from our paper. Interestingly, the authors copied our text to the extent that they mention using the same ICRISAT strain as reference susceptible. Nigel Ames, ICRISAT, who had the strain, informed me that it was not given officially or unofficially to anybody except CICR and TNAU. With the best of our efforts the three centres were able to maintain it for two years until December 1998. The reference to ICRISAT strain hence seems to be in doubt. Whatever little differences in the body of their paper could probably be credited to the reviewers or the editors. We appreciate that imitation is a greatest form of flattery, but feel sad that the authors chose a prestigious journal such as *Current Science* to publish a plagiarized paper.

1. Fakrudin, B., Badari Prasad, P. R., Prakash, S. H., Krishnareddy, K. B., Patil,

B. V. and Kuruvinashetti, M. S., *Curr. Sci.*, 2003, **84**, 1304–1307.  
2. Kranthi, K. R., Kranthi, S. and Wanjari, R. R., *Int. J. Pest Manage.*, 2001, **47**, 141–145.

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### Reply:

We compared both articles. So far as the text and format of the paper are concerned, Kranthi is right. However, our results are distinct and different. We did refer to his article in the initial stages of planning experiments, besides others. The working draft of the paper was prepared by one of our research fellows; but I own the moral responsibility for his act on behalf of the group. Unlike Kranthi *et al.*, we used 6–7 day old larvae as the resistant and susceptible neonates seldom differ for their

response to toxins and leaf dip bioassay which is close to the natural way of insect feed. The survey locations were fixed in the year 1999–2000 itself to represent distinct cotton ecosystems.

The ICRISAT strain referred to in this study was provided by B. V. Patil, Department of Agricultural Entomology, College of Agriculture, Raichur. Indeed we needed a susceptible strain for our work on differential display (mRNA) and marker development; Kranthi was kind enough to send the susceptible strain twice, but the pupae arrived dead. For molecular work, we used the Delhi strain provided by G. T. Gujar (IARI, New Delhi).

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## Link to delink

Interlinking of major rivers in India has become a buzzword with the formation of a task force. The over-ambitious scheme at a cost of Rs 560,000 crores proposes 30 river links, about 1000 km long canals, about 400 dams primarily for irrigation and to reduce flooding. There appears to be undue haste to implement the gigantic project with dubious utility without going for a meaningful detailed discussion, dialogue and debate among scientists, engineers, technocrats, academicians and social scientists. If we go by the words of the chairman of the task force, work was to start by the end of 2003, whereas the detailed report of the project will be ready only by 2006. Thus it appears that we have started counting the chickens before the eggs are hatched. So far it appears that the matter is confined and revolves around bureau-

crats and politicians and is yet to be subjected to rigorous scrutiny of the scientific community<sup>1</sup>.

The main task of the project is to transmit water from water surplus basins to water deficient ones<sup>2</sup>. This has to be done after careful studies based on stream flow data, water availability, rain fall and run-off relations. In most cases data are meagre, and where some data are available, they are often based on assumptions which can go wrong<sup>2</sup>. There is no consensus as to which basin has water surplus and which one is water deficient; Mahanadi and Godavari are two of the many to name where State and Central government organizations are at dispute. There are concrete and direct evidences that glaciers in Baspa basin of Himachal Pradesh are shrinking<sup>3</sup>. If the trend continues, it will have very adverse effect on

the rivers in north India and in turn on the river linking project, as the very logic of linking water surplus north Indian basins to water deficient basins will be at flaw. Besides, doubts may be cast, going by the track records of many projects, (Sardar Sarovar, Tehri, Sutlej–Yamuna link canal, Telugu–Ganga<sup>2</sup> to name a few), as to how socio-economic-political implications, rehabilitation problems, soil and ecological degradation, water logging and so on will be effectively tackled. If these problems are not solved to the satisfaction of the people, it may lead to interstate tensions, social discord and conflict and can even go beyond the political boundary of the country<sup>4</sup> if the water resource (like aquifer or river) has a trans-boundary nature.

Historical evidence shows that although water was not at the centerstage of wars,

some wars (like the war fought on the banks of Tigris and Euphrates) had some connections to water. We see trends of tensions in urban areas and inter-state disharmony (we should not forget the social unrest in Karnataka and Tamil Nadu only recently over water). Another future inter-state tension over water may be between Bihar and Jharkhand with the Bihar government proclaiming not to allow water to flow downwards and bringing *Gangamaiya* to the doorsteps of people at Patna. The river-linking project can easily, and at any moment, become a bone of contention even between nations like India, Pakistan, Nepal and Bangladesh as these countries share many common rivers. Neighbouring Bangladesh has already expressed concern about the river-linking project.

The sooner we realize that we must allow the rivers to flow freely, the better it is for our own survival. River dynamics is a complex phenomenon and it requires in-depth multi-disciplinary approach to study this. We are a scientific civilization. One suitable option, at this juncture, may be to go for linking of rivers to a very limited extent, maybe between sub-basins of a big basin and strengthen movements of rainwater harvesting, groundwater recharge, water conservation, water recycling and alternate irrigation like drip irrigation<sup>2</sup>. Some of these smaller projects are age-old, time-tested, effective and people-oriented and are of proven utility as far as our civilization goes. It is high time we rose to the occasion and realize ground realities, else the fanciful idea of interlinking the major rivers will

destroy the beautiful mosaic of society and delink the socio-economic-cultural threads that we have woven through time.

1. Rao, K. K., *Curr. Sci.*, 2003, **85**, 565.
2. Radhakrishna, B. P., *Curr. Sci.*, 2003, **84**, 1390–1394.
3. Sharma, D. C., *Hindustan Times*, 28 February 2004.
4. Gurjar, B. R., *Curr. Sci.*, 2003, **84**, 1381–1382.

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## Sivaraj Ramaseshan – A reminiscence

It was in the fall of 1995 that Falk Reiss and myself at the University of Oldenburg, Germany started research on C. V. Raman. Our leitmotiv was to replicate (that is, to repeat under original conditions as close as possible) Raman's experiments, which led to the discovery of Raman effect. After some preliminary research, we wrote letters to those who, we thought, knew about Raman. For the first time on 21 March 1996, Ramaseshan informed us about the existence of a Baby Quartz Spectrograph (which was used in 1928 by Raman) at the Indian Association for the Cultivation of Sciences, Kolkata. We realized that there could not be a historical work on Raman without help from Ramaseshan. But we did not know who Ramaseshan was and what he had to do with Raman. Soon the situation was going to change, and this 'curious wonderful person' was to become an integral part of my intellectual life.

From one of Ramaseshan's e-mails, we learnt about G. Venkataraman's excellent book on Raman<sup>1</sup>. Taking it as the starting point, in the following two years, I found interesting correspondence between Raman and some German physicists. One of them was Max Born. I discussed the content with Ramaseshan.

Later, one of the letters was reproduced in *Current Science*<sup>2</sup>. Its content was so important that *Nature* published a news item under the title 'Insult thwarted 1934 bid to raise profile of Indian Science'<sup>3</sup>. In the following months I received packets of Ramaseshan's articles: 'Dorothy Hodgkin and the Indian Connection', 'C. V. Raman's German Connection' and 'Raman Memorial Lectures'.

As I became familiar with Ramaseshan's contacts with various high-ranking scientists and his contribution to Indian science, I suggested to him to write his autobiography, as I was/am of the opinion that prominent scientists of India's post-independence era are a special case of India's scientific heritage. Their life history may give an insight into the successes and failures of our past. This may help us in planning the future with care. I was disappointed. On 5 March 1998, Ramaseshan wrote, 'I ink people like me should write their biographies. I do not think it will be of much educational value, although it may be of historical value in connection with some of the great men who I knew'. I tried to rebut his views but without success.

At another time, we discussed/disputed the issue related to 'Born-Raman lattice

dynamics theory'. On 18 April 1996, Ramaseshan wrote, 'I don't think it is worth going deeply into this controversy because Raman was obviously wrong in his formulation of the theory and his theory was just a very small part of a more comprehensive theory given by Born'. I was of the opinion that, from the historical point of view, the correctness or falsehood of a theory plays a minor role. The important questions are: What was going on behind the stage, while the controversy took place? How did the two parties react? In this particular case, how far should we believe Max Born's autobiography? According to me (I never told this to Ramaseshan), like most of the Indian physicists, Ramaseshan was influenced by Max Born's autobiography<sup>4</sup> and also by the words of British crystallographer Kathleen Lonsdale (1903–71), who was well known among Indian crystallographers.

Another issue that I wish to point out, is Ramaseshan's fascination for Raman and the Nobel Prize. On 26 June 1998, Ramaseshan told me that when he asked the Nobel Committee for nomination letters related to Raman's Nobel Prize, they turned down the request. In his words, 'Unless I am doing serious research on Raman, they would not send me those